

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
)
Fiorenzo Draghetti, et al.) Examiner: Landrum, Edward F.
)
Serial No.: 10/579,866) Group Art Unit: 3724
)
Filed: March 23, 2007) Confirmation No.: 3831

For: CUTTING UNIT FOR CUTTING CONTINUOUS CIGARETTE RODS

LETTER REQUESTING INTERVIEW PURSUANT TO MPEP 713.01

Sir:

Pursuant to MPEP 713.01, applicants respectfully request a telephonic interview between applicants' representatives and the Examiner in regards to the above referenced application.

Applicants include herewith suggested claim amendments and new claims that are believed to further clarify the structure and features of applicants' claimed subject matter.

Firstly, applicants note with appreciation that claim 4 has been objected to as being dependent upon a rejected base claim, and the Examiner has indicated that claim 4 would be allowable if re-written in independent form including all of the limitations of the base claim and any intervening claims. Applicants propose to amend independent claim 1 to include all of the limitations of claims 2-4. See Appendix A appended hereto. As such, applicants propose to cancel claims 2-4. As such, applicants respectfully submit that proposed independent claim 1 is now in condition for allowance.

Additionally, new independent claim 14 recites, *inter alia*, that applicants' claimed dual-rod manufacturing machine includes:

- "motorized locking means (24) for angularly locking the cutting head (12) in position on said supporting body (9), said motorized locking means (24) including automatic release means (48) provided with a motorized actuator (53) for releasing the cutting head (12) with respect to the supporting body (9);"

- “motorized actuating means (27, 31, 32) that are separated from and structurally and operably independent from the motorized locking means (24) and interposed between the supporting body (9) and the cutting head (12) to rotate the cutting head (12) about said first axis (20) to vary said angle;”
- “wherein the motorized actuating means (27, 31, 32) are not utilized by the motorized locking means (24) for angularly locking the cutting head (12) in position on the supporting body (9) or for releasing the cutting head (12) with respect to the supporting body (9);” and
- “wherein the motorized locking means (24) are not utilized by the motorized actuating means (27, 31, 32) to rotate the cutting head (12) about the first axis (20) to vary the angle.” See Appendix A appended hereto.

Applicants also propose to amend paragraphs [0011], [0012], [0014] and [0015] of the specification to include a description of new FIG. 7. See Appendix B appended hereto and new FIG. 7.

Applicants respectfully request a formal telephonic interview to discuss the suggested newly presented claims and proposed amendments to the specification in the hopes of establishing a mutual understanding and further advancing prosecution of the subject application.

More particularly and in regards to applicants’ new independent claim 14, applicants respectfully believe that a formal telephonic interview will permit clarification of the Examiner’s characterization of the cited art (e.g., Jourdan (USPN 6,601,494) [hereinafter “Jourdan”]) relative to the proposed new claims of the subject application.

More particularly, applicants believe that the limited scope and contents of Jourdan (along with the other cited art), relating to a mechanism for varying the position of a band saw blade in a tilting frame band saw, fails to adequately disclose or teach at least the above-noted limitations of applicants’ new independent claim 14.

More specifically and unlike applicants' dual-rod manufacturing machine, applicants note that Jourdan teaches a distinctly different assembly. More particularly and unlike applicants' presently claimed machine, the structure of Jourdan's actuating means 32 is used by the locking means 30.

See, e.g., Jourdan at col. 3, lines 8-13 and Figure 3: "The actuator 32 is mounted to . . . plate 30 for the actuator 32. A clevis 38 in combination with a pin 39 connect one end of the actuator 32 to the tilt arm 24. The upper portion of the tilt arm 24 is pivotably connected to the plate 30 by a shaft 44 (supported by bearings not shown) and a nut 46;" and

Jourdan at col. 3, lines 15-17: "the brake 48 is used to hold the frame 14 in a fixed position by clamping the plate 30 (which is structurally mounted to the actuator 32), once a final position for the frame has been achieved by operation of the actuator 32." (emphasis added).

In other words, Jourdan only discloses utilizing locking means 30, 48 that use the structure of the actuating means 32 to perform their desired function. In short and unlike applicants' advantageous dual-rod manufacturing machine, the structure of Jourdan's actuating means 32 is used by the locking means 30. Thus, nowhere does Jourdan teach, suggest or disclose a dual-rod manufacturing machine having, *inter alia*, "motorized locking means (24) for angularly locking the cutting head (12) in position on said supporting body (9), said motorized locking means (24) including automatic release means (48) provided with a motorized actuator (53) for releasing the cutting head (12) with respect to the supporting body (9);" and "motorized actuating means (27, 31, 32) that are separated from and structurally and operably independent from the motorized locking means (24) and interposed between the supporting body (9) and the cutting head (12) to rotate the cutting head (12) about said first axis (20) to vary said angle;" and "wherein the motorized actuating means (27, 31, 32) are not utilized by the motorized locking means (24) for angularly locking the cutting head (12) in position on the supporting body (9) or for releasing the cutting head (12) with respect to the supporting body (9);" and "wherein the motorized locking means (24) are not utilized by the motorized actuating means (27, 31, 32) to rotate the cutting head (12) about the first axis (20) to vary the angle."

Since the cited art fails to disclose, teach or suggest a dual-rod manufacturing machine having the above-noted limitations, these limitations are not obvious, or a simple management of

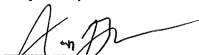
parts. Thus, one skilled in the art would find nothing in the cited art, alone or in combination that would suggest or any reason for making the machine of applicants' independent claim 14. Even if one combines the references as suggested by the Examiner, one skilled in the art would find nothing in the combination that would disclose, teach or suggest the claimed dual-rod manufacturing machine.

For at least these reasons, applicants respectfully submit that new independent claim 14 patentably distinguishes over the cited art.

CONCLUSION

Applicants believe that a formal telephonic interview will facilitate clarification and resolution of the above-noted issues. If the Examiner feels that any issues need to be discussed prior to the requested interview or if the Examiner wishes to discuss scheduling of the interview, the Examiner is invited to call the undersigned attorney directly at (203) 399-5946 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible. Although applicants believe that no further fees are due in connection with this request, the Commissioner is hereby authorized to charge counsel's Deposit Account No. 503570 for any fees required to make this request timely and acceptable to the Office.

Respectfully submitted,



Aaron P. Bumgarner
Reg. No. 53,860
Attorney for Applicants

Date: March 7, 2011

MCCARTER & ENGLISH LLP
One Canterbury Green
201 Broad Street
Stamford, CT 06901
203-399-5946
203-399-5846 (fax)
abumgarner@mccarter.com

APPENDIX A - SUGGESTED CLAIM AMENDMENTS

Amendments to the Claims

Please amend the claims, without prejudice, to read as follows:

What Is Claimed Is:

1. (Currently Amended) A cutting unit for cutting continuous cigarette rods fed in a given travelling direction (6), the cutting unit (1) comprising:

a supporting body (9);

a cutting head (12) fitted to the supporting body (9) to rotate about a first axis (20), the cutting head (12) including a cutting drum (15), which rotates about a second axis (16) forming a given angle with said travelling direction (6), and has at least one radial blade (8);

a counter-cutting device (4), which is engaged by at least one said continuous cigarette rod (3);

motorized locking means (24) for angularly locking the cutting head (12) in position on said supporting body (9); said motorized locking means (24) including automatic release means (48) provided with a motorized actuator (53) for releasing the cutting head (12) with respect to the supporting body (9); ~~and~~

motorized actuating means (27, 31, 32) that are separated and structurally independent from the motorized locking means (24) and interposed between the supporting body (9) and the cutting head (12) to rotate the cutting head (12) about said first axis (20) to vary said angle; and sensor means (23) for determining said angle and for negative-feedback-controlling said actuating means (27, 31, 32);

wherein said sensor means (23) includes a scale (33) located on said cutting head (12), and a fixed optical reader (35) for determining said angle on said scale (33);

wherein said cutting head (12) further comprises a curved lateral surface (34) supporting said scale (33) and a circle formed by the curved lateral surface (34) has an axis that is coaxial with said first axis (20); and

wherein said optical reader (35) faces said scale and is positioned radially with respect to said first axis (20).

2-4. (Canceled).

5. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 1, and also comprising guide means (21) interposed between the cutting head (12) and the supporting body (9) to guide the cutting head (12) on the supporting body (9) during rotation about said first axis (20).

6. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 5, wherein said guide means (21) comprise a rib (25), which projects from said supporting body (9) and extends, on the supporting body (9), along a first arc; and a slot (26), which is formed on said cutting head (12), extends along a second arc of the same radius as the first arc, and is engaged in sliding manner by said rib (25).

7. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 1, wherein said actuating means (27, 31, 32) comprise a motor reducer (27) fitted to said supporting body (9); a pinion (31) parallel to said first axis (20) and activated by said motor reducer (27); and a ring gear (32) coaxial with said first axis (20), fitted to said cutting head (12), and engaged by said pinion (31).

8. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 1, wherein said supporting body (9) and said cutting head (12) comprise a first and, respectively, a second plate (11, 14) contacting each other; said locking means (24) comprising at least one pin (36) extending in axially sliding manner through said first plate (11) and fitted in transversely sliding and axially fixed manner to said second plate (14); elastic means (46) being interposed between said pin (36) and said first plate (11) to compress and lock said first and second plate (11, 14) against each other.

9. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 8, wherein said pin (36) has an end portion comprising an end plate (38); said second plate (14) having a curved, T-section groove (39); and said end portion engaging said groove (39) in transversely sliding manner.

10. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 8, wherein said automatic release means (48) comprise push means (51) carried by said supporting body (9) and acting on said pin (36) to move the pin (36) axially in opposition to said elastic means (46).

11. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 10, wherein said push means (51) are cam means acting axially on said pin (36).

12. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 11, wherein said locking means (24) comprise two pairs of said pins (36); said automatic release means (48) comprising, for each said pair of pins (36), a rod (50), which has a third axis (52) crosswise to the relative said pins (36), and is fitted with two cams (51), each of which cooperates with one end (47) of a respective said pin (36), and an actuating device (53, 54, 56) for rotating said rod (50) about said third axis (52).

13. (Withdrawn, Rejoinder requested) A cutting unit as claimed in claim 12, wherein said actuating device (53, 54, 56) is common to said rods (50), and comprises a linear actuator (53); and an articulated quadrilateral, in turn comprising two cranks (55), each fitted to a respective said rod (50); said linear actuator (53) having an output (54) connected to one of said cranks (55).

14. (New) A dual-rod manufacturing machine (M) comprising:
 a producing unit (59) for producing two substantially parallel, continuous cigarette rods (3); and
 a cutting unit (1) for cutting cigarette portions (2) of given length from the two substantially parallel, continuous cigarette rods (3);
 wherein the cutting unit includes:
 a supporting body (9);
 a cutting head (12) fitted to the supporting body (9) to rotate about a first axis (20), the cutting head (12) including a cutting drum (15), which rotates about a second axis (16) forming a given angle with said travelling direction (6), and has at least one radial blade (8);
 a counter-cutting device (4), which is engaged by at least one said continuous cigarette rod (3);
 motorized locking means (24) for angularly locking the cutting head (12) in position on said supporting body (9), said motorized locking means (24) including automatic release means (48) provided with a motorized actuator (53) for releasing the cutting head (12) with respect to the supporting body (9); and

motorized actuating means (27, 31, 32) that are separated from and structurally and operably independent from the motorized locking means (24) and interposed between the supporting body (9) and the cutting head (12) to rotate the cutting head (12) about said first axis (20) to vary said angle;

wherein the motorized actuating means (27, 31, 32) are not utilized by the motorized locking means (24) for angularly locking the cutting head (12) in position on the supporting body (9) or for releasing the cutting head (12) with respect to the supporting body (9); and

wherein the motorized locking means (24) are not utilized by the motorized actuating means (27, 31, 32) to rotate the cutting head (12) about the first axis (20) to vary the angle.

15. (New) The machine of claim 14 further comprising sensor means (23) for determining said angle and for negative-feedback-controlling said actuating means (27, 31, 32).

16. (New) The machine of claim 15, wherein said sensor means (23) includes a scale (33) located on said cutting head (12), and a fixed optical reader (35) for determining said angle on said scale (33).

17. (New) The machine of claim 16, wherein said cutting head (12) further comprises a curved lateral surface (34) supporting said scale (33) and a circle formed by the curved lateral surface (34) has an axis that is coaxial with said first axis (20); and

wherein said optical reader (35) faces said scale and is positioned radially with respect to said first axis (20).

18. (New) The machine of claim 14 further comprising a main motor (60) of the machine, which drives a shaft (17) of the cutting drum (15) to rotate the cutting drum (15) about the second axis (16).

APPENDIX B - SUGGESTED AMENDMENTS TO THE SPECIFICATION

Amendments to the Specification

Please amend paragraphs [0011], [0012], [0014] and [0015] of the specification, without prejudice, to read as follows:

[0011] FIG. 4 shows a partly sectioned side view of the FIG. 3 detail;
 FIG. 5 shows an enlarged view of a core and blade of the cutting unit of FIG. 1; and
 FIG. 6 shows an enlarged view of a counter-cutting device of the cutting unit of FIG. 1[-] ; and
FIG. 7 shows schematically a dual-rod manufacturing machine supporting the FIG. 1 cutting unit.

BEST MODE FOR CARRYING OUT THE INVENTION

[0012] Number 1 in FIGS. 1 and 2 indicates as a whole a cutting unit for cutting cigarette portions 2 of given length from two parallel continuous cigarette rods 3 produced on a known dual-rod manufacturing machine M (not shown in FIG. 7) supporting cutting unit 1, the rods 3 produced by a producing unit 59.

[0014] In addition to counter-cutting device 4, cutting unit 1 also comprises a supporting body 9, which, by means of a lateral connecting plate 10, is connected integrally to a fixed frame (not shown) of the manufacturing machine M (not shown in FIG. 7), projects from said frame (not shown), and is bounded at the top by a horizontal plate 11 supporting a known cutting head 12.

[0015] With reference to FIG. 1, cutting head 12 comprises a casing 13 having a base plate 14 fitted to plate 11; and a cutting drum 15 projecting laterally from casing 13, and fitted to

casing 13 to rotate, anticlockwise in FIG. 1, about an axis 16 by means of a shaft 17 housed inside casing 13 and driven by a main motor 60 (~~not shown in FIG. 7~~) of the manufacturing machine M (~~not shown in FIG. 7~~). Along its outer periphery, cutting drum 15 supports a number of cylindrical, substantially radial cores 18 (only one shown in FIG. 1), which are adjustable angularly about respective axes 19, and are fitted on their respective outer ends with respective known, substantially radial blades 8.